

WHAT IS CLAIMED IS:

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1. An electronic device comprising:
a substrate;
a lower electrode layer on the support and
comprising a material capable of reactive-ion etching
with a fluorine-based gas; and
an upper electrode layer on the lower
electrode layer and comprising a material capable of
reactive-ion etching with a chlorine-based gas.

2. An electronic device according to Claim 1,
wherein the lower electrode comprises at least one
element selected from the group consisting of Si, Mo, W,
B, C, S and Ta.

3. An electronic device according to Claim 2,
wherein the lower electrode has a thickness of about 0.5
nm to 1000 nm.

4. An electronic device according to Claim 3,
wherein the support comprises a piezoelectric material.

5. An electronic device according to Claim 4,
wherein the lower electrode has a thickness of about 5-
500 nm.

6. An electronic device according to Claim 5,
wherein the substrate is selected from the group
consisting of a single crystal substrate, single crystal
film, triaxial orientation film and uniaxial orientation
film.

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7. An electronic device according to Claim 1, wherein the lower electrode has a thickness of about 0.5 nm to 1000 nm.

8. An electronic device according to Claim 1, wherein the support comprises a piezoelectric material.

9. An electronic device according to Claim 1, wherein the substrate is selected from the group consisting of a single crystal substrate, single crystal film, triaxial orientation film and uniaxial orientation film.

10. A method for manufacturing an electronic device, comprising the steps of:

providing a substrate having a base film on a surface thereon, said base film comprising a material capable of reactive-ion etching with a fluorine-based gas;

forming a cover film comprising a material capable of reactive-ion etching with a chlorine-based gas on the base film;

forming a mask having a predetermined pattern on the cover film;

etching the cover film by chlorine-based gas reactive ion etching; and

etching the base film exposed by etching of the cover film by fluorine-based gas reactive ion etching.

11. A method according to Claim 10, wherein the base film contains at least one element selected from the group consisting of Si, Mo, W, B, C, S and Ta.

12. A method according to Claim 11, wherein the base film has a thickness of about 0.5 nm to 1000 nm.

13. A method according to Claim 12, wherein the base film has a thickness of about 1-500 nm.

14. A method according to Claim 13, wherein the substrate comprises a piezoelectric material.

15. A method according to Claim 13, wherein the substrate is selected from the group consisting of a single crystal substrate, single crystal film, triaxial orientation film and uniaxial orientation film.

16. A method according to Claim 10, wherein the base film has a thickness of about 0.5 nm to 1000 nm.

17. A method according to Claim 10, wherein the base film has a thickness of about 1-500 nm.

18. A method according to Claim 10, wherein the substrate comprises a piezoelectric material.

19. A method according to Claim 10, wherein the substrate is selected from the group consisting of a single crystal substrate, single crystal film, triaxial orientation film and uniaxial orientation film.